



# Northeastern GIS Day 2024

Learn from Faculty, Show off your GIS Projects, and Network with GIS Professionals! Lunch/Drinks Provided!

Hybrid across global campuses, but we encourage in-person attendance for the best experience!

## NU's GIS Day - Nov 20th, 2024

Northeastern University Library and the School of Public Policy and Urban Affairs are celebrating GIS Day on November 20th, 2024.

Join us for a day of interactive events, including short talks, a StoryMap competition, and digital showcasing. GIS Day is an opportunity to celebrate innovative projects that use these techniques and to network with other users.

This event is sponsored by:

- **Dr. Stephen Flynn, Director of NU Global Resilience Institute**
- **Dr. Eric Piza, Director of NU Crime Analysis Initiatives**
- **NULab for Digital Humanities and Computational Social Science**
- **Northeastern University Library**

## **- Northeastern University School of Public Policy and Urban Affairs**

## **- Northeastern University Planning, Real Estate, and Facilities (PREF)**

The event will be conducted in-person, with faculty presentations and the competition primarily in-person, however, a Zoom link is available for Northeastern's global campuses or for extenuating circumstances in the Boston area. The in-person mode of the event will be held at the new event space on the First Floor of Snell Library (before the ID scanners on the left side); online presentations will be held in video-conference mode, and refreshments and lunch will be provided. Please register below:

### **Register**

### **Outline**

(For more information on each event, click the links to view more information within this page.)



## Reception

10:00AM | Coffee and Chat (Only for in-person attendees)

## Introduction

10:15 - 10:30AM | Welcome Speech from Dean Dan Cohen

## Talks by NU GIS Users

10:30 - 10:45AM | H. Killion Mokwete, NU Boston (African Built Research Hub)

10:45 - 11:00AM | Dr. Peter Maber, NU London (Mapping Global Literatures)

11:00 - 11:15AM | Dr. Eric Piza, Savannah Reid, and Christianna Palermo, NU Boston

| (Using GIS and GPS Data to Explore Police Officer Patrol Behaviors)

11:15 - 11:30PM | Dr. Shawn Bhimani NU Boston (SupplyTrace.org)

## Q&A / Snack Break

11:30 - 11:45AM

## More Talks

11:45 - 12:00PM | [Dr. Fang Fang, NU Boston](#)

(Green Space Alone is Not Enough:

| From Exploring Street Trees

Patterns using GIS to Developing

| Policy Strategies)

12:00 - 12:15PM | [Dr. Mark Henderson, NU](#)

Oakland (When Geographies Collide:

| Hierarchical Regional Systems

in China's Great Leap Famine)

12:15 - 12:30PM | [Planning, Real Estate and](#)

[Facilities \(PREF\)](#), NU Boston

## Lunch / Q&A / Geoguessr Challenge

12:35 - 1:15PM | Show off your Geoguessr skills on the big screen!

## StoryMaps Competition

1:15 - 1:45PM

Following a "science fair" format, competitors will present their StoryMaps to attendees and the jurors in charge of ranking them for the chance to win Amazon gift cards! Attendees can also participate in Q&A during this time and interact with StoryMaps. For more info, click [here](#).

## StoryMaps Competition Awards

1:45 - 2:00PM

The jurors will announce the top three StoryMaps, with each winner receiving an Amazon gift card in varying amounts. The "Attendees' Favorite" Story Map will also receive an Amazon gift card.

## Workshop: HOT Mapathon

2:00 - 3:15PM

Attendees can learn GIS skills or practice their own by working with the Humanitarian OpenStreetMap Team (HOT) to map parts of the Caribbean! For more info, click [here](#).

**Note: Please bring your laptop for the Mapathon**

## Celebration, Networking, and Geoguessr Challenge

3:15 - 4:00PM | -Celebrating Glenn Hazleton  
| -Network with Faculty, Students,  
Staff, and other StoryMap  
| Presenters  
| -Show off your Geoguessr skills  
on the big screen!

## Food Provided for In-person Attendees!

The event will be conducted in hybrid mode for global campuses to visit GIS Day, but presentations, competition, and workshop will be in person, which will be open to the public. The in-person mode of the event will be held at the Snell Library First Floor New Event Space.

Pastries, coffee and lunch will be provided for in-person attendees!



## Short Talks

### **10:30 - 10:45AM (EST) - Killion Mkwete, In-person**

Professor Mkwete will be presenting his African Built Heritage Hub website, which enables the preservation of Sub-Saharan African architectural heritage through social involvement and through the use of 3D laser scanning, photogrammetry, and various storytelling digital technologies.

*GIS Resources Used: ArcGIS Hub, ArcGIS Dashboard, 3D laser scanning, BIM, drones*

### **10:45 - 11:00AM (EST) - Peter Maber, Virtual**

This collaborative project sees students studying global literatures learn digital mapping skills to produce maps which illuminate ancient times, places, and narratives. Their first project centers on *The Epic of Gilgamesh*, and tracks both epic journeys and wider points of reference in the text. Such mapping facilitates new insights, for example into the relationships between mythical and real time and place.

*GIS Resources Used: ArcGIS (layered map and Story Map)*

### **11:00 - 11:15AM (EST) - Eric Piza, Savannah Reid, and Christianna Palermo, In-person**

Policing is largely defined by low-levels of in-field supervision and high levels of officer autonomy, which presents significant challenges to accurately measuring officer activity in the field.

Professor Piza, Savannah Reid, and Christianna Palermo's study applies spatial analysis techniques to automated vehicle locator (GPS trackers of patrol cars) data to analyze police officer activity in Kansas City, MO and Manchester, NH. This novel methodology provides a blueprint for supporting evidence-based policing practice.

*GIS Resources Used: Crime Analysis Solution, ArcGIS Online, Animation pane*

### **11:15 - 11:30AM (EST) - Shawn Bhimani, Virtual**

Supply Trace is an accessible, open platform that exposes potential risks in global supply chains by combining expert desk-based research investigations with machine learning/mapping of customs records and other relevant supply chain data. Supply Trace is available for anyone to search who has an interest in better understanding supply chain conditions, including companies, government, civil society and more. By democratizing access to information on risks within global supply chains, our hope is that abuses will be remediated, resulting in improved supply chain conditions for all.

*GIS Resources Used: Geolocation services (ArcGIS) of global entities*

### **11:45 - 12:00PM (EST) - Fang Fang, In-person**

Urban green-spaces are crucial for supporting a healthy and sustainable urban environment. In this talk, Professor Fang will discuss how to systematically evaluate the quantity and quality of urban street trees in the District of Columbia using various GIS data. This work identifies the spatial patterns in urban greenspaces, addresses environmental inequities in climate adaptation plans and helps promote a more resilient urban greenery system.

*GIS Resources Used: ArcGIS, remote sensing, time-series analysis*

## **12:00 - 12:15PM (EST) - Mark Henderson, Virtual**

Professor Mark Henderson's project presents a new approach to analyzing spatial variations in the demographic impact of China's Great Leap Forward (1958-61) using reliable geo-referenced data.

Building on the insights of anthropologist G. William Skinner, we direct attention to the conflicting spatial logics of political and market hierarchies. This approach compels us to reexamine conclusions drawn from data aggregated at the level of politically defined units—provinces, prefectures, counties, and townships—even as we find that political choices made at those levels had significant effects on local demographic outcomes.

*GIS Resources used: ArcGIS, spatial overlay analysis, analytic cartography, historical GIS*

## **12:15 - 12:30PM (EST) - Planning, Real Estate, and Facilities, In-person**

NU Boston's Planning, Real Estate, and Facilities team will be presenting their most recent GIS research.

## **StoryMap Competition**

### **1:45 - 2:45PM (EST) - In-person**

The digital StoryMaps created by the Northeastern University community (students, staff & alumni) will be presented in person. The presenters will be showcasing their findings, while answering any questions from attendees. A panel of jurors, along with feedback from attendees through a voting system, will determine the top three StoryMaps. Registered attendees can cast votes for their favorite StoryMap to pick the "Attendees' Favorite" StoryMap, which will be awarded an Amazon gift card.

*Awards will be distributed as follows:*

- The jurors will announce the top three StoryMaps, with each winner receiving an Amazon gift card in varying amounts.
- The "Attendees' Favorite" Story Map, will also receive an Amazon



gift card.

Competitors are required to submit their final project to [guthrie.j@northeastern.edu](mailto:guthrie.j@northeastern.edu) by Friday, November 15th. This ensures all projects are complete and ready for setup ahead of the event.

### **[View Story Map Instructions](#)**

## **Workshop: HOT Mapathon**

### **3:00 - 3:30PM (EST) - In-person**

Attendees will have the opportunity to make a difference globally, while learning about key GIS practices! The Humanitarian OpenStreetMap Team (HOT) will be hosting a Mapathon during Northeastern's GIS Day with a focus on mapping communities in Tobago, within the country of Trinidad and Tobago. Attendees will learn about the OpenStreetMap and Task Manager software.

### **[Learn More](#)**

### **Event Organizers and Sponsors**

**[NULab for Digital Humanities and Computational Social Science](#) //  
**[Northeastern University Library Research Data Services](#) // **[Northeastern University School of Public Policy and Urban Affairs](#)******

**Justin Guthrie**

RDS GIS Co-op, Creator of  
StoryMap